

## ABSTRACT

Disclosed is a method of manufacturing polymer materials having properties that are determined by selected process conditions. The properties can be modified for a variety of applications. Exemplary applications are pads for chemical mechanical planarization of substrates and pads for polishing substrates. One embodiment of the method includes the steps of providing a polymer sheet having a substrate contacting area, heating the area a sufficient amount, and applying a sufficient amount of mechanical pressure to the area during at least a portion of the heating step to achieve the desired properties for the material.